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NOTES FROM THE FIELD.

NOTES ON THE MAMMALS AND BIRDS OF THE HUDSONIAN ZONE,
CASCADE MTS., 49th PARALLEL.

By Allan Brooks.

At various times between the years 1839 and 1900, I made a number of hunting and collecting trips into the high mountains of the Cascade range in the neighborhood of the 49th parallel.

The highest of these mountains would not exceed 8000 feet and most of the region worked lay between 5000 and 7000 feet.

To pin the exact location down, I usually entered the locality on the labels as "Mt. Baker Range, 49th Par." This indicated the western Cascades due north of Mt. Baker, but properly speaking the region was separated from that mountain by the deep cleft of the Nooksack river.

My objective in all cases was the beautiful park-like country lying in the Hudsonian zone. To get there necessitated a very arduous climb of about 5000 feet through an abominable country, largely dense brush and down timber, without any water until the Alpine meadows above 5000 feet were reached. All supplies had to be carried on one's back and all collections brought out in a similar manner.

Some of the bird records are of interest as they were the first and possibly in one case the only records of a species for the State of Washington.

The trips undertaken in the years 1895 and '96 were devoted chiefly to mammals, and as several species and sub-species were described from the material collected, an exact definition of the locality will not be amiss even at this late date.

My main collecting ground for high altitudes in this region was the Hudsonian zone on Liumsdén mountain lying between the Liumsdén and Tam-a-hý creeks, both of which are tributary to the Chilliwack (on old maps Chilliweyuk) river.

The camp at which I collected the types of Eutamias felix Rhoads, and Peromyscus oreas Bangs, besides several other species now relegated to synonymy, lay in a cirque below timber line, altitude about 6000 feet. This was in a very beautiful and park-like country, the 49th parallel lay about two miles to the south, and several trips were made along the ridge running south which meets the high wall forming the northern watershed of the Nooksack canyon.

Considerable variation was encountered in the mammalian fauna even in two successive years.

Phenacomys orophilus, ("Phenacomys oramontis" Rhoads), which was the most abundant vole in 1895, was almost absent in '96 at exactly the same season; also it had shifted its quarters from a low-lying alpine meadow with a dense growth of Carex, to the dry slopes covered with short heather-like plants. The locality where I took my series in '95 yielded only Microtus arvicoloides ("M. principalis" Rhoades), and Microtus mordax in '96, both of which were scarce the preceding year. Microtus oregoni serpens and Neurotrichus gibbsi, two common species of the lower Fraser valley, were encountered again at 7000 feet to my great surprise, as also was Eutamias townsendi, the chipmunk of the low levels. The commonest mammal of the Hudsonian zone was probably the Mountain Beaver, Aplodontia). All southern slopes with a good growth of alpine vegetation--

NOTES ON THE MAMMALS AND BIRDS OF THE HUDSONIAN ZONE. (Cont.)

Veratrum, Rubus, etc., were honeycombed with their burrows, and the total population of these animals throughout the zone would be astounding if it could be approximately estimated.

In all, twenty-seven species of mammals were recorded from this high region, twenty-three of which were collected.

Of birds, the more notable records were:- Pine Grosbeaks breeding in some numbers at about 6000 feet. The only skin collected there, remaining in my collection, has been identified by Mr. Oberholser as Pinicola enucleator montana, but the bird seems very small, even for a juvenile, by Ridgway's measurements; it certainly is nothing like the dark colored, hook-billed forms of the flamula group. The Slate-colored Sparrow was a scarce breeder. Only about 75 miles away on a clear day the islands of the Gulf of Georgia, which are the breeding grounds of the darkest member of the group, Passerella iliaca fuliginosa, could be seen. In this case also, the only specimen I have has been identified as P. i. schistacea, but it is so worn and ragged that its subspecific identity must be uncertain; it might be altivagans which has been recorded from the same range some fifty miles to the north, though on the eastern slope (near Lilloet).

A difficulty also arises in the determination of the Hermit Thrush of the region. This is the pale colored form common to the Cascades, Gold range, and Selkirks in southern British Columbia. Specimens from all these points have been identified by Mr. Oberholser as Hylocichla guttata sequoiensis; it is however a very much smaller bird than that subspecies from California though the coloration is similar. Dr. Grinnell and Mr. Swarth call all these birds from British Columbia, except the northwest coastal strip, H. g. guttata.

The Horned Larks breeding on the highest mountains were Ctocoris alpestris arctica, and I can find no difference either in measurements or coloration between these and the migrants of late April and early May which presumably are on their way to the Arctic.

Lastly, the first specimens of the Alaska Three-toed Woodpecker, Picoides americanus fasciatus taken in British Columbia were collected in this region.

All of the above mentioned mammals and birds were common to the whole of this mountain region on both sides of the international boundary and all of these records will stand for the State of Washington.

THE KITTLITZ MURRELET IN SOUTHEASTERN ALASKA.

By Ernest P. Walker.

I had kept especially close watch for the Kittlitz Murrelet (Brachyramphus southeastern Alaska since talking with Dr. Harry C. Oberholser /(brevirostris) in March, 1912, but not one did I see until August 3, 1921. On this date and on August 4 and 5, I found these murrelets in the tide rips near the middle of Glacier bay, where numbers were seen and thirteen collected.